IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant	:	Gregory N. Weismantel
Serial Number	:	10/053,935
Filing Date	:	January 24, 2002
Title	:	*METHOD AND SYSTEM FOR TRANSMITTAL OF EXTENDED DATA ATTRIBUTES OF PRODUCT ITEMS, PRICING AND TRADE PROMOTION TRANSACTIONS*
Confirmation No.	:	5964
Examiner	:	Bekerman, Michael
TC/Art Unit	:	3622
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APPEAL BRIEF

Mail Stop Appeal Brief-Patents
Commissioner for Patents
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Sir:

Appellant submits the following Appeal Brief under 37 C.F.R. § 41.37 appealing the Final Rejection from the USPTO dated July 6, 2007.

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I. REAL PARTY IN INTEREST

THE VISTA TECHNOLOGY GROUP, LTD., a Delaware corporation, having its principal place of business at 2570 Foxfield Road, Saint Charles, Illinois 60174, is the real party in interest of the present application. An assignment of all rights, title, and interest in the present application to THE VISTA TECHNOLOGY GROUP, LTD was executed by the inventor, and recorded by the U.S. Patent and Trademark Office at reel 012523, frame 0827.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

The present application contains 31 pending claims. Claims 1, 2, 6, 7, and 21-48 are rejected under 35 U.S.C. §103(a) as being unpatentable over Jain (6,993,506). A copy of claims 1, 2, 6, 7, and 21-48, the claims on Appeal, is enclosed in the Claims Appendix.

IV. STATUS OF AMENDMENTS

None.

V. SUMMARY OF CLAIMED SUBJECT MATTER

With respect to claim 1, the invention is a computer-based method for electronic communication between consumer goods trading partners comprising a software application program which communicates between first and second trading partners over an electronic communication link, see page 9, line 27 through page 10, line 28. The invention further includes inputting user-defined extended data attributes (302) by the first trading partner into a plurality of tables, see page 11, line 15 though page 12, line 11. A graphical user interface is used for this purpose, see page 12, lines 17-19 and FIG. 5A. Standard data attributes are then transmitted to the second trading partner, see page 11, lines 18-22. Finally the invention includes transmitting the extended data attributes from the plurality of tables as an XML-message to the second trading partner, see page 16, lines 1-3. The tables include a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data name field (401), extended data type field (404), extended data description field (403), extended entity type field (402), and unique link to the second trading partner, see page, 11 line 26 through, page 12, line 2 and FIG. 4A. The second table correlates each extended data type field used in the first table and includes an extended data type field, extended data type name field, and extended data type description field, see page 12, lines 3-5 and FIG. 4B. The third table correlates

each extended entity type used in the first table and includes an extended entity type field and extended entity type name field, page 12, lines 5-7 and FIG. 4C. Finally the fourth table correlates the extended data definition identification used in the first table and includes an entity owner of the extended data type definition (408) and values for each extended data attribute (407), see page 12, lines 8-11 and FIG. 4D.

With respect to claim 26, the invention is a computer-implemented method for electronic communication between trading partners. First, an electronic communication link between first and second trading partners is established, see page 9, lines 20-23. Standard data attributes associated with a commercial transaction are then transmitted from the first trading partner to the second trading partner, see page 11, lines 15-17. Extended data attributes associated with the commercial transaction are defined, see page 11, lines 12-14, in a plurality of tables through a graphical user interface, see page 12, lines 17-19 and FIG. 4A, and the extended data attributes are transmitted over the electronic communication link from the first trading partner to the second trading partner, see page 11, lines 14-15. The first table is for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data name field (401), extended data type field (402), extended data description field (403), extended entity type field (404), and unique link to the second trading partner, see page 11, line 26 through page 12, line 2 and FIG. 4A.

The second table correlates each extended data type field used in the first table, the second table including an extended data type field, extended data type name field, and extended data type description field, see page 12 lines 3-5 and FIG. 4B. The third table correlates each extended entity type used in the first table, the third table including an extended entity type field and extended entity type name field, see page 12, lines 5-7 and FIG 4C. Lastly, the fourth table correlates the extended data definition identification used in the first table, the fourth table including an entity owner of the extended data type definition (408) and values for each extended data attribute (407), see page 12 lines 8-11 and FIG. 4D.

With respect to claim 32, the invention is a computer-implemented method for electronic communication between trading partners. First an electronic communication link between first and second trading partners is established, see page 9, lines 20-23. Standard data attributes associated with a commercial transaction are then transmitted from the first trading partner to the second trading partner, see page 11, lines 15-17. Extended data attributes associated with the commercial transaction are defined, see page 11, lines 12-14, in a plurality of tables through a graphical user interface, see page 12, lines 17-19 and FIG. 5A. The extended data attributes are finally transmitted over the electronic communication link from the first trading partner to the second trading partner, see page 11, lines 14-15. The tables include a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table

including an extended data definition identification field, extended data type field (402), and extended entity type field (404), see page 11, lines 26-29 and FIG. 4A. The second table correlates each extended data type field used in the first table, see page 12, lines 3-5 and FIG. 4B. The third table correlates each extended entity type used in the first table, see page 12, lines 5-7 and FIG. 4C. Lastly, the fourth table correlates the extended data definition identification used in the first table, page 12, lines 8-11 and FIG. 4D.

With respect to claim 40, the invention is a computer-implemented method for electronic communication between trading partners. First an electronic communication link is established between first and second trading partners, see page 9, lines 20-23. Standard data attributes associated with a commercial transaction are then transmitted from the first trading partner to the second trading partner, see page 11, lines 15-17. Extended data attributes associated with the commercial transaction are defined in a plurality of tables, see page 11, lines 12-14 through a graphical user interface, see page 12, lines 17-19 and FIG. 5A. Finally, the extended data attributes are transmitted over the electronic communication link from the first trading partner to the second trading partner, see page 11, lines 14-15.

With respect to claim 44, the invention is a computer-based system for electronic communication between trading partners. First a means for an electronic communication link between first and second trading partners is

established, see page 9, lines 20-23. Next a means for transmitting standard data attributes associated with a commercial transaction from the first trading partner to the second trading partner is used, see page 11, lines 15-17. A means for defining the extended data attributes associated with the commercial transaction in a plurality of tables, see page 11, lines 12-14, through a graphical user interface is used, see page 12, lines 17-19 and FIG. 5A. Finally means for transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner is used, see page 11, lines 14-15.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1, 2, 6, 7, and 21-48 are unpatentable under 35 U.S.C. §103(a) over Jain (6,993,506).

VII. ARGUMENT

A. Legal Standard

Section 103(a) of Title 35 provides a standard for patentability of the claimed invention. To evaluate patentability under Section 103(a), the scope and content of the prior art are to be determined, differences between the prior art and the claims at issue are to be ascertained, and the level of ordinary skill in the pertinent art resolved. *Graham v. John Deere Co.* 383 U.S. 1 (1966). In considering the legal standard of obviousness, certain secondary considerations such as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to in order to establish a *prima facie* case of obviousness: (i) the claimed invention must be considered as a whole; (ii) the references must be considered as a whole; (iii) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (iv) there is a reasonable expectation of success. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986); *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In determining obviousness, the Supreme Court in *KSR Intl. Co. v. Teleflex Inc.* advocated a common sense approach. 127 S.Ct. 1727, 1741-43 (2007). Prior art is not limited to the references being applied, but includes

the background knowledge of one of ordinary skill in the art. *Id.* at 1742. Where the prior art does not teach or suggest all of the claimed limitations, the invention may still be obvious where the differences between the prior art and the claimed invention would be obvious to one of ordinary skill in the art. *Id.* at 1741. At the same time, neither is a patent proved obvious simply because each element is, independently, known in the prior art. *Id.* at 1739. The proper obviousness inquiry is "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id.* at 1740.

B. Claim 1 is patentable over prior art reference Jain (6,993,506).

The Final Office Action rejected claim 1 under 35 U.S.C. § 103 as being unpatentable over Jain (6,993,506). Appellant respectfully traverses the rejection and submits the following arguments in favor of reversal of the rejection and allowance of the claim.

In Appellant's response dated April 13, 2007, claim 1 was amended to more clearly distinguish over the prior art. Claim 1 recites a computer-based method for electronic communication between consumer goods trading partners comprising a software application program which communicates between first and second trading partners over an electronic communication link. The invention further includes inputting user-defined extended data attributes by the first trading partner into a plurality of tables. A

graphical user interface is used for this purpose. Standard data attributes are then transmitted to the second trading partner. Finally the invention includes transmitting the extended data attributes from the plurality of tables as an XML-message to the second trading partner. The tables include a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data name field, extended data type field, extended data description field, extended entity type field, and unique link to the second trading partner. The second table correlates each extended data type field used in the first table and includes an extended data type field, extended data type name field, and extended data type description field. The third table correlates each extended entity type used in the first table and includes an extended entity type field and extended entity type name field. Finally the fourth table correlates the extended data definition identification used in the first table and includes an entity owner of the extended data type definition and values for each extended data attribute.

The Jain reference does not teach or suggest inputting user-defined extended data attributes by the first trading partner into a plurality of tables through a graphical user interface. Jain does not use a combination of first, second, third, and fourth tables as claimed. More specifically, Jain does not have a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table

including an extended data definition identification field, extended data name field, extended data type field, extended data description field, extended entity type field, and unique link to the second trading partner. Jain also does not have a second table for correlating each extended data type field used in the first table, the second table including an extended data type field, extended data type name field, and extended data type description field. Further, Jain does not have a third table for correlating each extended entity type used in the first table, the third table including an extended entity type field and extended entity type name field. Finally, Jain does not have a fourth table for correlating the extended data definition identification used in the first table, the fourth table including an entity owner of the extended data type definition and values for each extended data attribute. Jain does not use these four tables to define the extended data attributes.

The Final Office Action agrees that Jain does not teach a plurality of tables for inputting extended data attributes as claimed. However, it is asserted that this is immaterial as the arrangement of the data would not affect the steps taken by the method claimed.

When analyzing a claim for obviousness, 35 U.S.C. § 103 provides that the determination is based on whether "the differences between the subject matter sought to be patented and the prior art are such that the *subject matter as a whole* would have been obvious." 35 U.S.C. § 103 (2007) (emphasis added). By including the statutory phrase "as a whole," Congress has required that, to deny

patentability under § 103, the *entire* subject matter of the claimed invention must be obvious. *Panduit Corp v. Dennison Mfg. Co.*, 810 F.2d 1561, 1576, (Fed. Cir. 1987). Thus, when judging the patentability of a claim under § 103, all of the words in the claim must be considered. *Application of Wilson*, 57 C.C.P.A. 1029, 1032-33, 424 F.2d 1382, 1384-85 (Cust.& Pat. App. 1970). An obviousness rejection cannot be supported where terms in a claim are ignored. *Wilson*, 424 F.2d at 1384-85.

In light of this, none of the language present in claim 1 can be discounted as immaterial. Immaterial is not the same thing as obvious. Claim 1 specifically requires a plurality of tables with the stated structure for inputting the user-defined extended data attributes and, therefore, these tables and their structure must be considered as part of the *entire* subject matter to be found obvious in making a rejection under § 103. That the tables and their structure would or would not affect the steps taken in the claimed invention is not relevant in the § 103 analysis. For Jain to support a § 103 rejection the standard is that the differences must be obvious, not that they must be immaterial. The Final Office action does not assert that the claimed tables and their structure are obvious in view of Jain. Thus the obviousness rejection based on Jain is unsupported.

Although not all elements of a claim need to be recited in the prior art references, those elements not found must be obvious to a person of ordinary skill in the art for the claim to be invalid. *KSR Intl. Co.*, 127 S.Ct at 1741. The Final Office Action provides that it would

have been obvious to one skilled in the art to arrange the data using any number of tables depending on how fast the data would need to be accessed. However, the patent application does not provide that the claimed arrangement of the standard and extended data attributes is for speed. Rather the arrangement of the standard and extended data attributes in the plurality of tables as claimed keeps the standard and extended attributes coupled together, see page 7, lines 23-25, and provides functionality for creating and maintaining extended custom data about any product, see page 12, lines 26-28. Jain does not teach arranging data for this purpose. Nor does the Final Office Action recite support for finding that using a plurality of tables with the characteristics claimed to keep both the standard and extended data attributes coupled together and to provide the functionality to maintain extended custom data about products would have been obvious to a person of ordinary skill in the art.

Further, Applicant respectfully disagrees that the plurality of tables for inputting and arranging the extended data attributes as claimed does not affect the steps taken by the claimed method. Claim 1 provides a method for electronic communication between consumer goods trading partners which specifically includes using the particular plurality of tables having the precise structure recited to input user-defined extended data attributes. Thus, this step of claim 1 is materially influenced by the plurality of tables as they are claimed.

The Final Office Action additionally states that Jain arguably does not teach all of the claimed data content of

the plurality of tables. However, it is further stated that the differences are nonfunctional descriptive material and therefore do not distinguish the claimed invention. Applicant respectfully disagrees and asserts that reliance on the cited cases, *In re Gulack*, 703 F.2d 1381, 217 USPQ 401 (Fed. Cir. 1983) and *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994), is misplaced.

The Federal Circuit in *Lowry* was similarly presented with a rejection referring to the differences in the prior art and the claimed invention as nonfunctional descriptive material, also known as a "printed matter rejection." *See Lowry*, 32 F.3d 1579, 32 USPQ2d 1031. The Court specifically held that such rejections do not apply to computer based methods. *Lowry*, 32 F.3d at 1582. In the cases upholding printed matter rejections, the claims reviewed provided an invention defined by symbols which were only useful and intelligible by the human mind. *Lowry*, 32 F.3d at 1582 (citing *In re Bernhart*, 417 F.2d 1395, 1399, 163 USPQ 611, 615 (CCPA 1969)). Such cases are not relevant where the claimed invention requires that the information be processed by a computer. *Lowry*, 32 F.3d at 1583.

In view of *Lowry*, the question of obviousness is not whether the differences between the claimed invention and Jain only pertain to nonfunctional descriptive material, but whether these differences are obvious to one skilled in the art. Here, the claimed invention is directed to a computer-based method where data is inputted by one entity, correlated among a plurality of tables, and transmitted to

a second entity. Populating correlated data fields in tables by taking data inputted via a graphical user interface and then transmitting it requires that the data be processed by a computer. Also like the claims at issue in *Lowry*, the structure of the tables claimed are not analogous to printed matter. *Lowry*, 32 F.3d at 1583. The claimed tables dictate how the computer-based method manages the information by imposing a physical organization to it. *Lowry*, 32 F.3d at 1583. Thus, the data fields of the plurality of tables claimed in the invention are not nonfunctional descriptive material; they are functionally involved with the steps recited. Jain does not teach the claimed tables or their structure and the Final Office Action does not provide support for finding that it would have been obvious to one of ordinary skill in the art to arrange the relevant data in tables as claimed.

Even assuming, arguendo, that the structure of the plurality of tables is analogous to printed matter, the reliance on *Gulack* is in error. 703 F.2d 1381. To hold a claim invalid based on obviousness, the PTO has the burden of establishing the absence of a novel, nonobvious functional relationship. *Lowry*, 32 F.3d at 1584. "If the examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent." *Lowry*, 32 F.3d at 1584 (quoting *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)).

The Final Office Action provides no argument for establishing that the structure of the plurality of tables

within the context of claim 1, lack a new and nonobvious *functional* relationship with the computer memory. Instead, it is asserted that the tables and their structure are nonfunctional descriptive material and, therefore, do not factor into the obviousness analysis when looking at the claimed invention in view of Jain. The structure of the plurality of tables keeps the standard and extended data attributes coupled together, facilitating effective presentation of completed item, pricing, or promotion, and allows the creation and maintenance of extended custom data about any product item. In sum, the structure of the plurality of tables performs a function. "*Gulack* requires no more." *Lowry*, 32 F.3d at 1584 (quoting *Gulack*, 703 F.2d at 1386). Thus, both cases cited in the Final Office Action are not applicable. The § 103 rejection based on Jain is therefore improper.

In light of the foregoing, claim 1 is believed to be patentably distinguishable over the prior art reference. Claims 2, 6, 7, and 21-25 are believed to be in condition for allowance as each is dependent from an allowable base claim.

C. Claim 26 is patentable over prior art reference Jain (6,993,506).

Claim 26 recites a computer-implemented method for electronic communication between trading partners comprising the steps of establishing an electronic communication link between first and second trading partners, transmitting standard data attributes associated with a commercial transaction from the first trading

partner to the second trading partner, defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface, and transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner. The tables include (a) a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data name field, extended data type field, extended data description field, extended entity type field, and unique link to the second trading partner, (b) a second table for correlating each extended data type field used in the first table, the second table including an extended data type field, extended data type name field, and extended data type description field, (c) a third table for correlating each extended entity type used in the first table, the third table including an extended entity type field and extended entity type name field, and (d) a fourth table for correlating the extended data definition identification used in the first table, the fourth table including an entity owner of the extended data type definition and values for each extended data attribute.

None of the prior art references of record, including the Jain reference, teach or suggest the step of defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface. None of the references use a combination of first, second, third, and fourth tables as claimed.

As with claim 1, the Final Office Action agrees that Jain does not teach a plurality of tables for inputting extended data attributes as provided for in claim 26. However, it is again asserted that this is immaterial as the arrangement of the data would not affect the steps taken by the method claimed.

As argued above, none of the language present in a claim can be discounted as immaterial when engaged in an obviousness analysis. Claim 26 specifically requires a plurality of tables with the stated structure for inputting the user-defined extended data attributes and, therefore, these tables and their structure must be considered as part of the *entire* subject matter to be found obvious in making a rejection under § 103. That the tables and their structure would or would not affect the steps taken in the claimed invention is not relevant in the § 103 analysis. For Jain to support a § 103 rejection the standard is that the differences must be obvious, not that they must be immaterial. The Final Office action does not assert that the claimed tables and their structure are obvious in view of Jain. Thus the obviousness rejection based on Jain is unsupported.

Further, it is in error to reject the plurality of tables of claim 26, which the Final Office Action states are not found in Jain, as being obvious to one skilled in the art as an appropriate arrangement of data based on how fast the data needs to be accessed. As argued for claim 1, the patent application does not provide that the claimed arrangement of the standard and extended data attributes in claim 26 is for speed. Rather the arrangement of the

standard and extended data attributes in the plurality of tables as claimed keeps the standard and extended attributes coupled together, see page 7, lines 23-25, and provides functionality for creating and maintaining extended custom data about any product, see page 12, lines 26-28. The Final Office Action does not recite support for finding that using a plurality of tables with the characteristics claimed to keep both the standard and extended data attributes coupled together and to provide the functionality to maintain extended custom data about products would have been obvious to a person of ordinary skill in the art.

The Applicant also respectfully disagrees that the plurality of tables for defining and arranging the extended data attributes as claimed does not affect the steps taken by the claimed method. Claim 26 provides a method for electronic communication between trading partners which specifically includes using the particular plurality of tables having the precise structure recited to define extended data attributes. Thus, claim 26 is materially influenced by the plurality of tables as they are claimed.

The Final Office Action also states that the aspects of claim 26 not found in Jain are nonfunctional descriptive material and therefore do not distinguish the claimed invention. As argued for claim 1, Applicant respectfully asserts that reliance on the cited cases, *In re Gulack*, 703 F.2d 1381, 217 USPQ 401 (Fed. Cir. 1983) and *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994), is misplaced.

The Federal Circuit in *Lowry* specifically held that § 103 rejections based on nonfunctional descriptive material are not applicable to computer based methods. *Lowry*, 32 F.3d at 1582. The claimed invention is directed to a computer-based method where data is defined via a graphical user interface, correlated among a plurality of tables, and transmitted to a second entity. Populating correlated data fields in tables via a graphical user interface and then transmitting it requires that the data be processed by a computer. The structure of the tables claimed are also not analogous to printed matter. The claimed tables dictate how the computer-based method manages the information by imposing a physical organization to it. *Lowry*, 32 F.3d at 1583. Thus, *Lowry* is not applicable.

The question of obviousness, therefore, is not whether the differences between the claimed invention and Jain only pertain to nonfunctional descriptive material, but whether these differences are obvious to one skilled in the art. Jain does not teach the claimed tables or their structure and the Final Office Action does not provide support for finding that it would have been obvious to one of ordinary skill in the art to arrange the relevant data in tables as claimed.

Assuming, arguendo as with claim 1, that the structure of the plurality of tables provided in claim 26 is analogous to printed matter, the reliance on *Gulack* is again in error. 703 F.2d 1381. The Final Office Action provides no argument for establishing that the structure of the plurality of tables within the context of claim 26,

lack a new and nonobvious *functional* relationship with the computer memory. Instead, it is only asserted that the tables and their structure do not factor into the obviousness analysis when looking at the claimed invention in view of Jain.

The structure of the tables keeps the standard and extended data attributes coupled together, facilitating effective presentation of completed item, pricing, or promotion, and allows the creation and maintenance of extended custom data about any product item. In sum, the structure performs a function. "*Gulack* requires no more." *Lowry*, 32 F.3d at 1584 (quoting *Gulack*, 703 F.2d at 1386). Thus, both cases cited in the Final Office Action are not applicable. The § 103 rejection based on Jain is therefore improper.

In light of the foregoing, claim 26 is believed to be patentably distinguishable over the prior art reference. Claims 27-31 are believed to be in condition for allowance as each is dependent from an allowable base claim.

D. Claim 32 is patentable over prior art reference Jain (6,993,506).

Claim 32 recites a computer-implemented method for electronic communication between trading partners comprising the steps of establishing an electronic communication link between first and second trading partners, transmitting standard data attributes associated with a commercial transaction from the first trading

partner to the second trading partner, defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface, and transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner. The tables include (a) a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data type field, and extended entity type field, (b) a second table for correlating each extended data type field used in the first table, (c) a third table for correlating each extended entity type used in the first table, and (d) a fourth table for correlating the extended data definition identification used in the first table.

None of the prior art references of record, including the Jain reference, teach or suggest the step of defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface. None of the references use a combination of first, second, third, and fourth tables as claimed.

As with claims 1 and 26, the Final Office Action agrees that Jain does not teach a plurality of tables for inputting extended data attributes as provided for in claim 32. However, it is again asserted that this is immaterial as the arrangement of the data would not affect the steps taken by the method claimed.

As argued, none of the language present in a claim can be discounted as immaterial when engaged in an obviousness

analysis. Claim 32 specifically requires a plurality of tables with the stated structure for inputting the user-defined extended data attributes and, therefore, these tables and their structure must be considered as part of the *entire* subject matter to be found obvious in making a rejection under § 103 based on Jain. The Final Office action does not assert that the claimed tables and their structure are obvious in view of Jain. Thus the obviousness rejection based on Jain is unsupported.

Further, it is in error to reject the plurality of tables of claim 32 as being obvious to one skilled in the art as an appropriate arrangement of data based on how fast the data needs to be accessed. As argued for claims 1 and 26, the patent application does not provide that the claimed arrangement of the standard and extended data attributes into a plurality of tables in claim 32 is for speed. Rather the arrangement keeps the standard and extended attributes coupled together, see page 7, lines 23-25, and provides functionality for creating and maintaining extended custom data about any product, see page 12, lines 26-28. The Final Office Action does not recite support for finding that using a plurality of tables with the characteristics claimed to keep both the standard and extended data attributes coupled together and to provide the functionality to maintain extended custom data about products would have been obvious to a person of ordinary skill in the art.

The Applicant further asserts that the plurality of tables for defining and arranging the extended data attributes as claimed does affect the steps taken by the

claimed method. Claim 32 provides a method for electronic communication between trading partners which specifically includes using the particular plurality of tables having the precise structure recited to define the extended data attributes. Thus, claim 32 is materially influenced by the plurality of tables as they are claimed.

Like with claims 1 and 26, the Final Office Action also states that the aspects of claim 32 not found in Jain are nonfunctional descriptive material and therefore do not distinguish the claimed invention. As previously argued, Applicant respectfully asserts that reliance on the cited cases, *In re Gulack*, 703 F.2d 1381, 217 USPQ 401 (Fed. Cir. 1983) and *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994), is misplaced.

The Federal Circuit in *Lowry* specifically held that § 103 rejections based on nonfunctional descriptive material are not applicable to computer based methods. *Lowry*, 32 F.3d at 1582. The claimed invention is directed to a computer-based method where data is defined via a graphical user interface, correlated among a plurality of tables, and transmitted to a second entity. Populating correlated data fields in tables via a graphical user interface and then transmitting it requires that the data be processed by a computer. The structure of the tables claimed are also not analogous to printed matter. The claimed tables dictate how the computer-based method manages the information by imposing a physical organization to it. *Lowry*, 32 F.3d at 1583. Thus, *Lowry* is not applicable.

The question of obviousness, therefore, is not whether the differences between the claimed invention and Jain only pertain to nonfunctional descriptive material, but whether these differences are obvious to one skilled in the art. Jain does not teach the claimed tables or their structure and the Final Office Action does not provide support for finding that it would have been obvious to one of ordinary skill in the art to arrange the relevant data in tables as claimed.

Assuming, arguendo as with claims 1 and 26, that the structure of the plurality of tables provided in claim 32 is analogous to printed matter, the reliance on *Gulack* is again in error. The Final Office Action provides no argument for establishing that the structure of the plurality of tables within the context of claim 32, lack a new and nonobvious *functional* relationship with the computer memory. Instead, it is only asserted that the tables and their structure do not factor into the obviousness analysis when looking at the claimed invention in view of Jain.

The structure of the plurality of tables keeps the standard and extended data attributes coupled together, facilitating effective presentation of completed item, pricing, or promotion, and allows the creation and maintenance of extended custom data about any product item. In sum, the structure performs a function. "*Gulack* requires no more." *Lowry*, 32 F.3d at 1584 (quoting *Gulack*, 703 F.2d at 1386). Thus, both cases cited in the Final

Office Action are not applicable. The § 103 rejection of claim 32 based on Jain is therefore improper.

In light of the foregoing, claim 32 is believed to be patentably distinguishable over the prior art reference. Claims 33-39 are believed to be in condition for allowance as each is dependent from an allowable base claim.

E. Claim 40 is patentable over prior art reference Jain (6,993,506).

Claim 40 recites a computer-implemented method for electronic communication between trading partners comprising the step of establishing an electronic communication link between first and second trading partners, transmitting standard data attributes associated with a commercial transaction from the first trading partner to the second trading partner, defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface, and transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner.

None of the prior art references of record, including the Jain reference, teach or suggest the means for defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface.

As with claims 1, 26, and 32, the Final Office Action asserts that it is immaterial that Jain does not teach defining the extended data attributes in a plurality of

tables by using a graphical user interface as provided in claim 40 as the arrangement of the data would not affect the steps taken by the claimed method. Applicant respectfully disagrees.

As argued, none of the language present in a claim can be discounted as immaterial when engaged in an obviousness analysis. Claim 40 specifically requires a plurality of tables for inputting the user-defined extended data attributes using a graphical user interface and, therefore, these elements must be considered as part of the *entire* subject matter to be found obvious in making a rejection under § 103 based on Jain. The Final Office action does not assert that such tables are obvious in view of Jain. Thus the obviousness rejection based on Jain is unsupported.

Further, rejecting the plurality of tables of claim 40, which the Final Office Action states are not found in Jain, as being obvious to one skilled in the art as an appropriate arrangement of data based on how fast the data needs to be accessed is in error. As argued for claims 1, 26, and 32, the patent application does not provide that the claimed arrangement of defining extended data attributes in a plurality of tables in claim 42 is for speed. Rather the arrangement keeps the standard and extended attributes coupled together, see page 7, lines 23-25, and provides functionality for creating and maintaining extended custom data about any product, see page 12, lines 26-28. The Final Office Action does not recite support for finding that using a plurality of tables with the characteristics claimed to keep both the standard and extended data attributes coupled together and to provide

the functionality to maintain extended custom data about products would have been obvious to a person of ordinary skill in the art.

The Applicant further asserts that the plurality of tables for defining and arranging the extended data attributes as claimed does affect the steps taken by the claimed method. Claim 40 provides a method for electronic communication between trading partners which specifically includes using a plurality of tables to define the extended data attributes therein through a graphical user interface. Thus, this step of claim 40 is materially influenced by the plurality of tables as they are claimed.

As with claims 1, 26, and 32, the Final Office Action states that the aspects of claim 40 not found in Jain are nonfunctional descriptive material and therefore do not distinguish the claimed invention. Applicant again respectfully asserts that reliance on the cited cases, *In re Gulack*, 703 F.2d 1381, 217 USPQ 401 (Fed. Cir. 1983) and *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994), is misplaced.

The Federal Circuit in *Lowry* specifically held that § 103 rejections based on nonfunctional descriptive material are not applicable to computer based methods. *Lowry*, 32 F.3d at 1582. The claimed invention is directed to a computer-based method where data in a plurality of tables is defined via a graphical user interface and transmitted to a second entity. Defining data fields in tables via a graphical user interface and then transmitting it requires that the data be processed by a computer. The plurality of

tables claimed are also not analogous to printed matter. The claimed tables dictate how the computer-based method manages the information by imposing a physical organization to it. *Lowry*, 32 F.3d at 1583. Thus, *Lowry* is not applicable.

The question of obviousness, therefore, is not whether the differences between the claimed invention and Jain only pertain to nonfunctional descriptive material, but whether these differences are obvious to one skilled in the art. Jain does not teach the tables as claimed and the Final Office Action does not provide support for finding that it would have been obvious to one of ordinary skill in the art to arrange the relevant data in such tables.

Like claims 1, 26, and 32, even assuming, arguendo, that the plurality of tables provided in claim 40 is analogous to printed matter, the reliance on *Gulack* is again in error. The Final Office Action provides no argument establishing that the use of the plurality of tables to define data therein via a graphical user interface, lacks a new and nonobvious *functional* relationship with the computer memory. Instead, it is only asserted that the tables do not factor into the obviousness analysis when looking at the claimed invention in view of Jain.

The structure of the plurality of tables keeps the standard and extended data attributes coupled together, facilitating effective presentation of completed item, pricing, or promotion, and allows the creation and maintenance of extended custom data about any product item.

In sum, the structure of the plurality of tables perform a function. "*Gulack* requires no more." *Lowry*, 32 F.3d at 1584 (quoting *Gulack*, 703 F.2d at 1386). Thus, both cases cited in the Final Office Action are not applicable. The § 103 rejection of claim 40 based on Jain is therefore improper.

In light of the foregoing, claim 40 is believed to be patentably distinguishable over the prior art reference. Claims 41-43 are believed to be in condition for allowance as each is dependent from an allowable base claim.

F. Claim 44 is patentable over prior art reference Jain (6,993,506).

Claim 44 recites a computer-based system for electronic communication between trading partners comprising means for establishing an electronic communication link between first and second trading partners, means for transmitting standard data attributes associated with a commercial transaction from the first trading partner to the second trading partner, means for defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface, and means for transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner.

None of the prior art references of record, including the Jain reference, teach or suggest the means for defining extended data attributes associated with the commercial

transaction in a plurality of tables through a graphical user interface.

The Final Office Action asserts for claim 44 that it is immaterial that Jain does not teach defining the extended data attributes in a plurality of tables by using a graphical user interface as the arrangement of the data would not affect the steps taken by the claimed method. Applicant respectfully disagrees.

As argued, none of the language present in a claim can be discounted as immaterial when engaged in an obviousness analysis. Claim 44 specifically requires a plurality of tables for inputting the user-defined extended data attributes using a graphical user interface and, therefore, these elements must be considered as part of the *entire* subject matter to be found obvious in making a rejection under § 103 based on Jain. The Final Office action does not assert that such tables are obvious in view of Jain. Thus the obviousness rejection based on Jain is unsupported.

Further, rejecting the plurality of tables of claim 44, not found in Jain, as being obvious to one skilled in the art as an appropriate arrangement of data based on how fast the data needs to be accessed is in error. As argued previously, the patent application does not provide that defining extended data attributes associated with a commercial transaction in a plurality of tables using a graphical user interface in claim 44 is for speed. Rather, the step allows the standard and extended attributes to be coupled together, see page 7, lines 23-25, and provides functionality for creating and maintaining extended custom data about any product, see page 12, lines 26-28. The

Final Office Action does not recite support for finding that using a plurality of tables to keep both the standard and extended data attributes coupled together and to provide the functionality to maintain extended custom data about products would have been obvious to a person of ordinary skill in the art.

The Applicant further disagrees with the assertion in the Final Office action that the plurality of tables for defining and arranging the extended data attributes as claimed does not affect the steps taken by the claimed method. Claim 44 provides a method for electronic communication between trading partners which specifically includes using a plurality of tables to define the extended data attributes associated with a commercial transaction therein through a graphical user interface. Thus, claim 44 is materially influenced by the plurality of tables as they are claimed.

As with claims 1, 26, 32 and 40, the Final Office Action states that the aspects of claim 44 not found in Jain are nonfunctional descriptive material and therefore do not distinguish the claimed invention. Applicant again respectfully asserts that reliance on the cited cases, *In re Gulack*, 703 F.2d 1381, 217 USPQ 401 (Fed. Cir. 1983) and *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994), is misplaced.

The Federal Circuit in *Lowry* specifically held that § 103 rejections based on nonfunctional descriptive material are not applicable to computer based methods. *Lowry*, 32 F.3d at 1582. The claimed invention is directed to a

computer-based method where data in a plurality of tables is defined via a graphical user interface and transmitted to a second entity. Defining data fields in tables via a graphical user interface and then transmitting it requires that the data be processed by a computer. The plurality of tables claimed are also not analogous to printed matter. The claimed tables dictate how the computer-based method manages the information by imposing a physical organization to it. *Lowry*, 32 F.3d at 1583. Thus, *Lowry* is not applicable.

The question of obviousness, therefore, is not whether the differences between the claimed invention and Jain only pertain to nonfunctional descriptive material, but whether these differences are obvious to one skilled in the art. Jain does not teach the tables as claimed and the Final Office Action does not provide support for finding that it would have been obvious to one of ordinary skill in the art to arrange the relevant data in such tables.

Again, even assuming, arguendo, that the plurality of tables provided in claim 44 is analogous to printed matter, the reliance on *Gulack* is again in error. The Final Office Action provides no argument establishing that the use of the plurality of tables to define data therein via a graphical user interface, lacks a new and nonobvious *functional* relationship with the computer memory. Instead, it is only asserted that the tables do not factor into the obviousness analysis when looking at the claimed invention in view of Jain.

VIII. CLAIMS APPENDIX

1. (Previously presented) A computer-based method for electronic communication between consumer goods trading partners, comprising:

providing a software application program which communicates between first and second trading partners over an electronic communication link;

inputting user-defined extended data attributes by the first trading partner into a plurality of tables through a graphical user interface, the tables including,

(a) a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data name field, extended data type field, extended data description field, extended entity type field, and unique link to the second trading partner,

(b) a second table for correlating each extended data type field used in the first table, the second table including an extended data type field, extended data type name field, and extended data type description field,

(c) a third table for correlating each extended entity type used in the first table, the third table including an extended entity type field and extended entity type name field, and

(d) a fourth table for correlating the extended data definition identification used in the first table, the fourth table including an entity owner of the extended data type definition and values for each extended data attribute;

transmitting standard data attributes to the second trading partner; and

transmitting the extended data attributes from the plurality of tables as an XML-message to the second trading partner.

2. (Previously presented) The computer-based method of claim 1, wherein the extended data attributes are selected from the group consisting of product, pricing, and trade promotions.

3-5. (Cancelled)

The plurality of tables keeps the standard and extended data attributes coupled together, facilitating effective presentation of completed item, pricing, or promotion, and allows the creation and maintenance of extended custom data about any product item. In sum, the structure of the plurality of tables perform a function. "*Gulack* requires no more." *Lowry*, 32 F.3d at 1584 (quoting *Gulack*, 703 F.2d at 1386). Thus, both cases cited in the Final Office Action are not applicable. The § 103 rejection of claim 44 based on Jain is therefore improper.

In light of the foregoing, claim 44 is believed to be patentably distinguishable over the prior art reference. Claims 45-48 are believed to be in condition for allowance as each is dependent from an allowable base claim.

G. Conclusion

When properly considered in view of the applicable legal standard, claims 1, 2, 6, 7, and 21-48 are believed to be patentable in view of the prior art of record. Appellant requests reversal of the final rejection and allowance of the subject patent application.

Respectfully submitted,
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6. (Previously presented) The computer-based method of claim 1, further including using pre-determined security measures to provide authorization for trading partners to input the extended data attributes into the plurality of tables.

7. (Previously presented) The computer-based method of claim 1, further including establishing the electronic communication link through the Internet.

8-20. (Cancelled)

21. (Previously presented) The computer-based method of claim 1, wherein the unique link to the second trading partner includes a global location number.

22. (Previously presented) The computer-based method of claim 21, wherein the extended entity type identification includes a designation for product, price, and promotion.

23. (Previously presented) The computer-based method of claim 1, wherein the first table further includes a field

to designate whether extended data is required by the second trading partner.

24. (Previously presented) The computer-based method of claim 1, wherein the extended data types are numeric, date, and text string.

25. (Previously presented) The computer-based method of claim 1, wherein the graphical user interface includes a plurality of data entry screens for creation and maintenance of the extended data attributes as defined in the first, second, third, and fourth tables.

26. (Previously presented) A computer-implemented method for electronic communication between trading partners, comprising:

establishing an electronic communication link between first and second trading partners;

transmitting standard data attributes associated with a commercial transaction from the first trading partner to the second trading partner;

defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface, the tables including,

(a) a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data name field, extended data type field, extended data description field, extended entity type field, and unique link to the second trading partner,

(b) a second table for correlating each extended data type field used in the first table, the second table including an extended data type field, extended data type name field, and extended data type description field,

(c) a third table for correlating each extended entity type used in the first table, the third table including an extended entity type field and extended entity type name field, and

(d) a fourth table for correlating the extended data definition identification used in the first table, the fourth table including an entity owner of the extended data type definition and values for each extended data attribute; and

transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner.

27. (Previously presented) The computer-implemented method of claim 26, wherein the electronic communication link is routed through the Internet.

28. (Previously presented) The computer-implemented method of claim 26, wherein the extended entity type identification includes a designation for product, price, and promotion.

29. (Previously presented) The computer-implemented method of claim 26, wherein the graphical user interface includes a plurality of data entry screens for creation and maintenance of the extended data attributes as defined in the first, second, third, and fourth tables.

30. (Previously presented) The computer-implemented method of claim 26, wherein the extended data attributes relate to product, price, and promotion.

31. (Previously presented) The computer-implemented method of claim 26, wherein the extended data attributes are transmitted as XML-based messages.

32. (Previously presented) A computer-implemented method for electronic communication between trading partners, comprising:

establishing an electronic communication link between first and second trading partners;

transmitting standard data attributes associated with a commercial transaction from the first trading partner to the second trading partner;

defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface, the tables including,

(a) a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data type field, and extended entity type field,

(b) a second table for correlating each extended data type field used in the first table,

(c) a third table for correlating each extended entity type used in the first table, and

(d) a fourth table for correlating the extended data definition identification used in the first table; and

transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner.

33. (Previously presented) The computer-implemented method of claim 32, wherein the first table further includes an extended data name field, extended data description field, and unique link to the second trading partner.

34. (Previously presented) The computer-implemented method of claim 32, wherein the second table includes an extended data type field, extended data type name field, and extended data type description field.

35. (Previously presented) The computer-implemented method of claim 32, wherein the third table including an extended entity type field and extended entity type name field.

36. (Previously presented) The computer-implemented method of claim 32, wherein the fourth table includes an entity owner of the extended data type definition and values for each extended data attribute.

37. (Previously presented) The computer-implemented method of claim 32, wherein the graphical user interface includes a plurality of data entry screens for creation and maintenance of the extended data attributes as defined in the first, second, third, and fourth tables.

38. (Previously presented) The computer-implemented method of claim 32, wherein the extended data attributes relate to product, price, and promotion.

39. (Previously presented) The computer-implemented method of claim 32, wherein the extended data attributes are transmitted as XML-based messages.

40. (Previously presented) A computer-implemented method for electronic communication between trading partners, comprising:

establishing an electronic communication link between first and second trading partners;

transmitting standard data attributes associated with a commercial transaction from the first trading partner to the second trading partner;

defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface; and

transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner.

41. (Previously presented) The computer-implemented method of claim 40, wherein the tables include:

a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data name field, extended data type field, extended data description field, extended entity type field, and unique link to the second trading partner;

a second table for correlating each extended data type field used in the first table, the second table including

an extended data type field, extended data type name field, and extended data type description field;

a third table for correlating each extended entity type used in the first table, the third table including an extended entity type field and extended entity type name field; and

a fourth table for correlating the extended data definition identification used in the first table, the fourth table including an entity owner of the extended data type definition and values for each extended data attribute.

42. (Previously presented) The computer-implemented method of claim 40, wherein the graphical user interface includes a plurality of data entry screens for creation and maintenance of the extended data attributes as defined in the plurality of tables.

43. (Previously presented) The computer-implemented method of claim 40, wherein the extended data attributes relate to product, price, and promotion.

44. (Previously presented) A computer-based system for electronic communication between trading partners, comprising:

means for establishing an electronic communication link between first and second trading partners;

means for transmitting standard data attributes associated with a commercial transaction from the first trading partner to the second trading partner;

means for defining extended data attributes associated with the commercial transaction in a plurality of tables through a graphical user interface; and

means for transmitting the extended data attributes over the electronic communication link from the first trading partner to the second trading partner.

45. (Previously presented) The computer-based system of claim 44, wherein the tables include:

a first table for providing extended data definitions of each extended data attribute, each extended data definition in the first table including an extended data definition identification field, extended data name field, extended data type field, extended data description field,

extended entity type field, and unique link to the second trading partner;

a second table for correlating each extended data type field used in the first table, the second table including an extended data type field, extended data type name field, and extended data type description field;

a third table for correlating each extended entity type used in the first table, the third table including an extended entity type field and extended entity type name field; and

a fourth table for correlating the extended data definition identification used in the first table, the fourth table including an entity owner of the extended data type definition and values for each extended data attribute.

46. (Previously presented) The computer-based system of claim 44, wherein the graphical user interface includes a plurality of data entry screens for creation and maintenance of the extended data attributes as defined in the plurality of tables.

47. (Previously presented) The computer-based system of claim 44, wherein the extended data attributes relate to product, price, and promotion.

48. (Previously presented) The computer-based system of claim 44, wherein the extended data attributes are transmitted as XML-based messages.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.